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# Claims

1. A method for producing a rotating body (01) of a printing press, having a barrel (02) with a profiled body (04), wherein the profiled body (04) is arranged in a groove (31) formed on a shell face (07) of the barrel (02) and is welded together with the barrel (02), characterized in that the profiled body (04) is connected with the barrel (02) by means of electron beam welding.

2. The method in accordance with claim 1, characterized in that the profiled body (04) is placed into the barrel (02) with a protrusion (a) toward the shell face (07).

3. A method for producing a rotating body (01) of a printing press, having a barrel (02) with a profiled body (04), wherein the profiled body (04) is arranged in a groove (31) formed on a shell face (07) of the barrel (02), characterized in that the profiled body (04) is formed on walls of the groove (31), which are located opposite each other in the circumferential direction of the barrel (02), by applying material in a method in accordance with welding technology.

4. The method in accordance with claim 3, characterized in that for forming the profiled body (04) material is applied to the groove (31) by means of welding

technology in such a way that the profiled body (04) forms a protrusion (a) on the shell face (07) of the barrel (02).

5. The method in accordance with claim 1 or 3, characterized in that a corrosion-proof protective layer (33) is applied to the shell face (07) of the barrel (02), or a covering (36) of a corrosion-proof material is applied.

6. The method in accordance with claim 1 or 3, characterized in that a protective layer (33) on the basis of nickel or iron-austenite-cobalt is applied to the shell face (07) of the barrel (02) by means of a high-speed flame-spraying method.

7. The method in accordance with claim 1 or 3, characterized in that a protective layer (33) consisting of titanium oxide is applied to the shell face (07) of the barrel (02) by means of a flame-spraying method.

8. The method in accordance with claim 5, 6 or 7, characterized in that the shell face (07) of the barrel (02) provided with the protective layer (33), including a front face (34) of the profiled body (04) oriented toward the shell face (07), is re-surfaced or ground.

9. A rotating body (01) having a barrel (02) with a profiled body (04), wherein the profiled body (04) is introduced into a groove (31) formed on the shell face (07) of the barrel (02) and is welded together with the barrel (02) on surfaces which are spaced apart from each other in

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the direction of the circumference of the barrel (02), wherein the profiled body (04) at least partially covers the groove (31) in the shell face (07), characterized in that a structural depth of the profiled body (04) is less than a depth of the groove (31) which substantially extends radially into the barrel (02).

10. The rotating body (01) in accordance with claim 9, characterized in that the groove (31) is embodied as a flow channel (37) through which a heat-carrying medium flows, and that the profiled body (04) closes the groove (31) off toward the shell face (07).

11. The rotating body (01) in accordance with claim 9, characterized in that at least one holding means (22) for maintaining a dressing (03) on the shell face (07) of the barrel (02) is arranged in the groove (31), and the profiled body (04) covering the groove (31) has a slit-shaped opening (11), which partially opens the groove (31) toward the shell face (07).

12. A rotating body (01) having a barrel (02) with a profiled body (04), wherein the profiled body (04) is introduced into a groove (31) formed on the shell face (07) of the barrel (02) and is welded together with the barrel (02) on a joining surface, characterized in that two profiled bodies (04) which are spaced apart from each other in the direction of the circumference of the barrel (02), are at least arranged at or near the shell face (07) in the groove (31) and form a slit-shaped opening (11) at least in the

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shell face (07), wherein the two profiled bodies (04) delimit a bracing channel (06), which is arranged in the groove (31) and has at least one holding means (22) for holding a dressing (03) arranged on the shell face (07) of the barrel (02), in the direction toward the shell surface (07).

13. The rotating body (01) in accordance with claim 9 or 12, characterized in that the rotating body (01) is arranged in a printing press.

14. The rotating body (01) in accordance with claim 9 or 12, characterized in that the groove (31) extends in the axial direction of the rotating body (01).

15. The rotating body (01) in accordance with claim 9 or 12, characterized in that the groove (31) extends at least partially in the circumferential direction of the rotating body (01).

16. The rotating body (01) in accordance with claim 15, characterized in that the groove (31) extending in the circumferential direction of the rotating body (01) is embodied as a flow channel (37) connecting several flow channels (37) extending in the axial direction of the rotating body (01).

17. The rotating body (01) in accordance with claim 9 or 12, characterized in that the profiled body (04) is embodied as a molded piece.

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18. The rotating body (01) in accordance with claim 9 or 12, characterized in that in the axial direction of the rotating body (01) the profiled body (04) is embodied in the shape of a strip.

19. The rotating body (01) in accordance with claim 9 or 12, characterized in that several profiled bodies (04) are provided in the axial direction of the rotating body (01).

20. A rotating body (01) having a barrel (02) with a profiled body (04), wherein the profiled body (04) is arranged in a groove (31) formed on the shell face (07) of the barrel (02), characterized in that by applying material in a method in accordance with welding technology, the profiled body (04) is formed on walls of the groove (31), which are located opposite each other in the circumferential direction of the barrel (02), at least at or near the shell face (07).

21. The rotating body in accordance with claim 20, characterized in that the profiled body (04) has a slit-shaped opening (11) at a front face (34) facing the shell face (07).

22. The rotating body (01) in accordance with claim 9, 12 or 20, characterized in that the profiled body (04) consists of a corrosion-resistant material.

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23. The rotating body (01) in accordance with claim 22, characterized in that the profiled body (04) is made of special steel.

24. The rotating body (01) in accordance with claim 9 or 12, characterized in that at least a part of one of the joining surfaces close to the shell face (07) between the barrel (02) and the profiled body (04) is embodied with smooth walls and without a curvature in a sectional view transversely to the axial direction of the rotating body (01).

25. The rotating body (01) in accordance with claim 9, 12 or 20, characterized in that the groove (31) forms a bracing channel (06) with a round or a rectangular cross section.

26. The rotating body (01) in accordance with claim 9, 12 or 20, characterized in that the barrel (02) has a cover (36) forming the shell face (07) of the rotating body (01) and covering the surface (29) of a base body (28), wherein the grooves constituting a bracing channel (06) or a flow channel (37) are formed in the base body (28) and are each covered, at least partially, at the surface (29) of the base body (28) by a profiled body (04) arranged in the respective groove.

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27. The rotating body (01) in accordance with claim 9 or 12, characterized in that the profiled body (04) is welded by means of electron beam welding.

28. The rotating body (01) in accordance with claim 9 or 12, characterized in that, instead of by welding, the profiled body (04) is connected by hard soldering in a vacuum with the base body (28).

29. A rotating body (01) of a printing press, having a barrel (02) with an opening (11) on its shell face (07), wherein the opening (11) at the shell face (07) has at least one edge (18, 19), characterized in that the at least one edge (18, 19) is made of a corrosion-resistant material.

30. The rotating body (01) in accordance with claim 29, characterized in that the opening (11) has two oppositely located edges (18, 29) made of a corrosion-resistant material.

31. The rotating body (01) in accordance with claim 29, characterized in that the edge (18, 19) has been formed on a profiled body (04) arranged in the barrel (02).

32. The rotating body (01) in accordance with claim 31, characterized in that the profiled body (04) has been inserted into a groove (31) cut into the shell face (07), or has been applied to a wall of a groove (31) cut into the shell face (07).

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33. The rotating body (01) in accordance with claim 9, 12, 20 or 29, characterized in that the barrel (02) consists of a material susceptible to corrosion.

34. The rotating body (01) in accordance with claim 9, 12, 20 or 29, characterized in that the shell face (07) of the barrel (02) is covered with a corrosion-proof protective layer (33).

35. The rotating body (01) in accordance with claim 34, characterized in that the protective layer (33) completely, or at least in part, covers a front face (34) of the profiled body (04) oriented toward the shell face (07).